September 1, 2017 – September 30, 2017



September 1, 2017 – September 30, 2017

AKIMEKA | HIGH PRIORITY, HIGH IMPACT.

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September 1, 2017 – September 30, 2017

1. PSAP OPERATIONS

9-1-1 CALL VOLUME HAWAII COUNTY PSAPS - SEPTEMBER 2017

(Source: West Safety Services Viper system

(*) Totals are based on calls to Primary PSAP.

| | 9-1-1 Call Volume | | | | | | | | | | | | | | | | |
|---------------------|--------------------------------|-----------------------------|---------------------|-----------------------------|------------------------|-----------------------------------|-----------------------------------|-------------------------|------------------------|-----------------------------------|------------------------|--------------------------|------------------------|------------------------------|------------------------|--------------------------|---------------------|
| HAWAII COUNTY PSAPs | | Wir | eline | | Wire | less | | VC |)IP | Calls No | | Admir | n Calls | Aband Ca | | | Calls |
| 2017 | Total 9-1-1 Calls Processed | No. of Wireline Calls | % of Total Calls | No. of Wireless Calls | % of Total Calls | % of Wireless WPH1 Calls | % of Wireless WPH2 Calls | No. of VoIP Calls | % of Total Calls | No. of Calls with No ALI | % of Total Calls | No. of Admin Calls | % of Total Calls | No. of 9-1-1 Abandoned | % of Total Calls | No. of Other Calls | % of Total Calls |
| SEPT | 15,614 | 2,897 | 18.55% | 11,006 | 70.49% | 42.28% | 57.72% | 743 | 4.76% | 22 | 0.14% | 0 | 0.00% | 946 | 6.06% | 0 | 0.00% |

CALL VOLUME HAWAII COUNTY PSAP NOTES:

The percentage of Wireless Phase 2 calls (57.72%) has surpassed the number of Wireless Phase 1 calls (42.28%) in September 2017.

\$911 Calls with No Ali in September 2017 = 0.14% - Statewide average for 2016 = 0.15%

9-1-1 CALL VOLUME - CALENDAR YEAR 2017

| | 9-1-1 Call Volume | | | | | | | | | | | | | | | | |
|------------|--------------------------------|-----------------------------|---------------------|-----------------------------|------------------------|-----------------------------------|-----------------------------------|-------------------------|------------------------|-----------------------------------|------------------------|--------------------------|------------------------|------------------------------|------------------------|--------------------------|------------------------|
| | HAWAII COUNTY PSAPs | | Wireline | | Wireless | | | VOIP | | Calls with No ALI | | Admin Calls | | Abandoned Calls | | Other Calls | |
| 2017 | Total 9-1-1 Calls Processed | No. of Wireline Calls | % of Total Calls | No. of Wireless Calls | % of Total Calls | % of Wireless WPH1 Calls | % of Wireless WPH2 Calls | No. of VoIP Calls | % of Total Calls | No. of Calls with No ALI | % of Total Calls | No. of Admin Calls | % of Total Calls | No. of 9-1-1 Abandoned | % of Total Calls | No. of Other Calls | % of Total Calls |
| JAN | 17,004 | 3,088 | 18.16% | 11,658 | 68.56% | 45.79% | 54.21% | 961 | 5.65% | 18 | 0.11% | 0 | 0.00% | 1,279 | 7.52% | 0 | 0.00% |
| FEB | 14,128 | 2,676 | 18.94% | 9,675 | 68.48% | 45.03% | 54.97% | 670 | 4.74% | 29 | 0.21% | 0 | 0.00% | 1,078 | 7.63% | 0 | 0.00% |
| MAR | 16,310 | 2,859 | 17.53% | 11,328 | 69.45% | 44.99% | 55.01% | 966 | 5.92% | 33 | 0.20% | 0 | 0.00% | 1,124 | 6.89% | 0 | 0.00% |
| APR | 15,277 | 2,981 | 19.51% | 10,339 | 67.68% | 42.99% | 57.01% | 852 | 5.58% | 20 | 0.13% | 0 | 0.00% | 1,085 | 7.10% | 0 | 0.00% |
| MAY | 15,894 | 2,821 | 17.75% | 11,118 | 69.95% | 42.38% | 57.62% | 859 | 5.40% | 14 | 0.09% | 0 | 0.00% | 1,082 | 6.81% | 0 | 0.00% |
| JUNE | 15,204 | 2,906 | 19.11% | 10,439 | 68.66% | 41.08% | 58.92% | 804 | 5.29% | 18 | 0.12% | 0 | 0.00% | 1,037 | 6.82% | 0 | 0.00% |
| JULY | 16,812 | 3,133 | 18.64% | 11,694 | 69.56% | 41.93% | 58.07% | 837 | 4.98% | 16 | 0.10% | 0 | 0.00% | 1,132 | 6.73% | 0 | 0.00% |
| AUG | 16,545 | 2,879 | 17.40% | 11,692 | 70.67% | 41.76% | 58.24% | 847 | 5.12% | 14 | 0.08% | 0 | 0.00% | 1,113 | 6.73% | 0 | 0.00% |
| SEPT | 15,614 | 2,897 | 18.55% | 11,006 | 70.49% | 42.28% | 57.72% | 743 | 4.76% | 22 | 0.14% | 0 | 0.00% | 946 | 6.06% | 0 | 0.00% |
| ОСТ | | | | | | | | | | | | | | | | | |
| NOV | | | | | | | | | | | | | | | | | |
| DEC | | | | | | | | | | | | | | | | | |
| YTD | 142,788 | 26,240 | | 98,949 | | | | 7,539 | | 184 | | 0 | | 9,876 | | 0 | |
| MON AVG | 15,865 | 2,916 | 18.40% | 10,994 | 69.28% | 43.14% | 56.86% | 838 | 5.27% | 20 | 0.13% | 0 | 0.00% | 1,097 | 6.92% | 0 | 0.00% |



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9-1-1 CALL VOLUME BY AGENCY - SEPTEMBER 2017

| | | 9-1-1 Call Volume by Agency | | | | | | | | | | | | | |
|-----------|--------------------------------------|-----------------------------|--------------------------|---|--------------------------|--------------------------------------|---------------------|--------------------------|--|--------------------------|--|--|--|--|--|
| 2017 | | Hawaii | Police Dep | partment | Hawaii Fire Department | | | | | | | | | | |
| 2017 | Number of Total Calls Received | % of Total Calls | Number of Admin Calls | Number of Abandoned Dropped Calls | Number of Other Calls | Number of Total Calls Received | % of Total Calls | Number of Admin Calls | Number of Abandoned Dropped Calls | Number of Other Calls | | | | | |
| September | 12,433 | 79.63% | 0 | 922 | 0 | 2,235 | 14.31% | 0 | 24 | 0 | | | | | |

9-1-1 CALL VOLUME BY AGENCY - CALENDAR YEAR 2017

| | | | | 9-1-1 | Call Volui | ne by Agency | | | | | | |
|-----------|--------------------------------------|---------------------|--------------------------|---|--------------------------|--------------------------------------|---------------------|--------------------------|--|--------------------------|--|--|
| 2017 | | Hawaii | Police Dep | artment | | Hawaii Fire Department | | | | | | |
| 2017 | Number of Total Calls Received | % of Total Calls | Number of Admin Calls | Number of Abandoned Dropped Calls | Number of Other Calls | Number of Total Calls Received | % of Total Calls | Number of Admin Calls | Number of Abandoned Dropped Calls | Number of Other Calls | | |
| January | 13,182 | 77.52% | 0 | 1,237 | 0 | 2,543 | 14.96% | 0 | 42 | 0 | | |
| February | 11,065 | 78.32% | 0 | 1,048 | 0 | 1,985 | 14.05% | 0 | 30 | 0 | | |
| March | 14,146 | 86.73% | 0 | 1,097 | 0 | 2,164 | 13.27% | 0 | 27 | 0 | | |
| April | 12,191 | 79.80% | 0 | 1,065 | 0 | 2,001 | 13.10% | 0 | 20 | 0 | | |
| Мау | 12,605 | 79.31% | 0 | 1,053 | 0 | 2,207 | 13.89% | 0 | 29 | 0 | | |
| June | 11,997 | 78.91% | 0 | 1,015 | 0 | 2,170 | 14.27% | 0 | 22 | 0 | | |
| July | 13,180 | 78.40% | 0 | 1,112 | 0 | 2,500 | 14.87% | 0 | 20 | 0 | | |
| August | 13,191 | 79.73% | 0 | 1,082 | 0 | 2,241 | 13.54% | 0 | 31 | 0 | | |
| September | 12,433 | 79.63% | 0 | 922 | 0 | 2,235 | 14.31% | 0 | 24 | 0 | | |
| October | | | | | | | | | | | | |
| November | | | | | | | | | | | | |
| December | | | | | | | | | | | | |
| YTD | 113,990 | | 0 | 9,631 | 0 | 20,046 | | 0 | 245 | 0 | | |
| MON AVG | 12,666 | 79.82% | 0 | 1,070 | 0 | 2,227 | 14.03% | 0 | 27 | 0 | | |

PSAP OPERATION NOTES:

- Abandoned Calls represent the number of incoming 9-1-1 calls for which the caller had hung up before a call-taker answered. Abandoned Calls are **not** included in the % of Total Calls.
- All VoIP (Voice over Internet Protocol) types of 911 calls are combined in the Call Volume statistic.

September 1, 2017 – September 30, 2017

FOR YOUR INFORMATION

| | FYI For Your Information | | | | | | | | | | | |
|---|--|--------------------|----------------|--------|--|--|--|--|--|--|--|--|
| PSAP Operations | | | | | | | | | | | | |
| | Statewide 911 Cal | l Volumes for 2016 | & 2015 compare | | | | | | | | | |
| PSAP | | | | | | | | | | | | |
| Oahu Civilian | 1,009,059 | 71.93% | 1,019,402 | 70.94% | | | | | | | | |
| Hawaii County | 205,412 | 14.64% | 217,768 | 15.15% | | | | | | | | |
| Maui County | 137,333 | 9.80% | 142,952 | 9.95% | | | | | | | | |
| Kauai County | Kauai County 50,955 3.63% 56,874 3.96% | | | | | | | | | | | |
| Total 1,402,759 100.00% 1,436,997 100.00% | | | | | | | | | | | | |
| *Statewide average do | oes not include Militar | y 911 calls. | | | | | | | | | | |

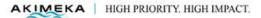
TEXT TO 911 - CURRENT MONTH - SEPTEMBER 2017

NOTE:

- 911 Text messages received at the Fire Department are transfers from the Police Department.
- Although there is a "Text to 911" plot on the MapFlex, the location of the plot is not reliable. Text to 911 Dispatchers should use their skills to ascertain the exact location of the emergency response.

| TEXT TO 911 Hawaii County PSAPs 2017 | | | | | | | | | | |
|--------------------------------------|-----------|-------------|--|--|--|--|--|--|--|--|
| Month | Received | Received at | | | | | | | | |
| WOTTET | at Police | Fire | | | | | | | | |
| January | 27 | 1 | | | | | | | | |
| February | 37 | 2 | | | | | | | | |
| March | 32 | 1 | | | | | | | | |
| April | 25 | 2 | | | | | | | | |
| May | 24 | 1 | | | | | | | | |
| June | 29 | 2 | | | | | | | | |
| July | 26 | 3 | | | | | | | | |
| August | 30 | 4 | | | | | | | | |
| September | 14 | 0 | | | | | | | | |
| October | | | | | | | | | | |
| November | | | | | | | | | | |
| December | | | | | | | | | | |
| YTD | 244 | 16 | | | | | | | | |
| Monthly Avg. | 27.11 | 1.78 | | | | | | | | |

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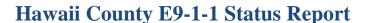
September 1, 2017 – September 30, 2017

WIRELESS PSAP TESTING – SEPTEMBER 2017

| | HAWAII COUNTY - SEPTEMBER 2017 | | | | | | | | | | | | |
|----------|--------------------------------|-----------------|-------------------|-------------|-------------------|-----------|--|--|--|--|--|--|--|
| Date | WSP | Sites Tested | Sectors Tested | Tested By: | Test Pass/Fail | Comments: | | | | | | | |
| 09/15/17 | Verizon | 1 | 6 | Hawaii PSAP | Pass | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

NOTES:

• There was one (1) scheduled Wireless 911 Test for the month of September, 2017.



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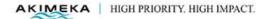
2. MSAG (MASTER STREET ADDRESS GUIDE)

MSAG TRANSACTIONS CURRENT MONTH/YEAR – SEPTEMBER 2017

| | | 9-1-1 TRANSACTIONS | | | | | | | | | |
|------------------|-------|---|----------|---------------|------------|------|-----------------------|---------|----------|--|--|
| HAWAII COUNTY | Total | Dispatchable Location Transactions Submitted | MSAG | ALI Submitted | | Disc | Customer Addresses | | | | |
| 2017 | | DL (A) | MSAG (B) | TN CR (C) | ALI DR (D) | TNCR | ALI DR | VoIP DR | Affected | | |
| JANUARY | 330 | 139 | 32 | 157 | 2 | 318 | 1 | 0 | 485 | | |
| FEBRUARY | 269 | 148 | 32 | 87 | 2 | 283 | 1 | 0 | 280 | | |
| MARCH | 302 | 216 | 28 | 57 | 1 | 203 | 1 | 0 | 423 | | |
| APRIL | 263 | 204 | 24 | 34 | 1 | 201 | 1 | 0 | 1,093 | | |
| MAY | 255 | 133 | 25 | 86 | 11 | 196 | 1 | 0 | 229 | | |
| JUNE | 272 | 159 | 35 | 74 | 4 | 165 | 1 | 0 | 368 | | |
| JULY | 270 | 150 | 26 | 93 | 1 | 164 | 0 | 0 | 259 | | |
| AUGUST | 265 | 222 | 11 | 31 | 1 | 158 | 0 | 0 | 262 | | |
| SEPTEMBER | 213 | 180 | 5 | 23 | 5 | 164 | 1 | 0 | 218 | | |
| OCTOBER | | | | | | | | | | | |
| NOVEMBER | | | | | | | | | · | | |
| DECEMBER | | | | | | | | | | | |
| TOTAL YTD | 2,439 | 1,551 | 218 | 642 | 28 | | | | 3,617 | | |
| AVG PER MONTH | 271 | 172 | 24 | 71 | 3 | | | | 402 | | |

Definitions

- (A) **D**ispatchable **L**ocation is defined in the FCC 15-9 Docket as the verified or corroborated street address of the calling party plus additional information such as floor, suite, apartment or similar information that may be needed to adequately identify the location of the calling party. Please see Dispatchable Location Section for more information.
- (B) **M**aster **S**treet **A**ddress **G**uide Represents corrections made to street records including, street names, address ranges, MSAG Communities and ESNs.
- (C) **T**elephone **N**umber **C**hange **R**equest Represents address corrections on a specific TN or group of TNs. These "invalid" TNs usually have an associated ESN 299 attached to them which indicates the need for validation.
- (D) **A**utomatic **L**ocation **I**nformation **D**iscrepancy **R**ecord Represents an address discrepancy discovered during a live 9-1-1 call, from a landline OR a VoIP phone. These record corrections are treated with a higher priority and should be processed within 48 hours if wireline, and 72 hours if a VoIP phone, as a general guideline.



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MSAG CURRENT MONTH NOTES:

A total of **213** MSAG transactions were processed in 9-1-1 Net during the current month. Five (**5**) requests were processed relating to the MSAG database. Changes include: changes to high – low street ranges, combining street records, deletion of invalid records, splitting street records to align with Police, Fire, EMS and Military response areas, and inserting new MSAG records.

There were 218 customer ANI/ALI (telephone number/address) records updated as a direct result.

TELEPHONE RECORD (ALI) TRANSACTIONS CURRENT MONTH NOTES:

203 Telephone Number Change Requests (TN CR) transactions were processed in 9-1-1 Net with valid MSAG addresses, as a result of the ESN 299 clean-up effort and the Dispatchable Location Project. ESN 299 TN CRs must be validated against HT records and approved by the end user Hawaiian Telcom customer before updating the ALI record. Four (4) ALI DRs were submitted as the result of a 9-1-1 call from a residences in Kailua Kona, Kamuela, Kealakekua and Pahoa. Hawaii County Fire Department and Hawaii Police submitted these change requests to Akimeka to update the customer information and the discrepancy was corrected in 9-1-1 Net and by Spectrum via email.

OPEN TELEPHONE RECORD (ALI) DISCREPANCY STATUS:

- There are currently 164 Open TN CR Transactions.
- Refer to chart in the next section "TNCR Current Status"

164 Open TN CR transactions are a direct result of the ESN 299 clean-up and are awaiting approval from Hawaiian Telcom, Inc. Once a telephone number is submitted to West for correction, it is verified against HT records and/or by the customer. West's internal process requires calling each telephone customer individually for verification to update an address in the 9-1-1 database. Akimeka continues to monitor and track the progress of the remaining 164 Referred records.

• There is currently one (1) Open ALI-DR

One Open ALI DR was submitted in September for a resident in Ookala. Akimeka is researching caller address to confirm valid location.

• There are currently no Open VoIP DRs.

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TNCR (TELEPHONE NUMBER CHANGE REQUEST) CURRENT STATUS - SEPTEMBER 2017

NOTE:

- 9-1-1 NET is a secure web-based application that provides access to request changes to the MSAG, ALI, TN, and ESN/ELT data supported and maintained by West Safety Services for the Telephone Company (TelCo).
- TNCRs are not requests to change Telephone Numbers (TNs); however, it is a corrective process within 9-1-1 NET to modify location information associated with an Automatic Location Identification (ALI) record to a valid MSAG address for 9-1-1 purposes.

| PSAP 9-1-1 Telephone Number Location Change Request (Telephone Number Change Request (TNCR) Status) | | | | | | | | | | |
|--|---|---|--|--------------------------------|--|--|--|--|--|--|
| County | TOTAL TNCR RECORDS SUBMITTED BY AKIMEKA | OPENED TNCRS PENDING FURTHER ACTION BY WEST SAFETY SERVICES (INTRADO) | OPENED TNCRS REFERRED TO TELCO BY WEST SAFETY SERVICES (INTRADO) | TOTAL UNOPENED TNCR RECORDS | | | | | | |
| HAWAII | 164 | 136 | 28 | 0 | | | | | | |

STATUS

TOTAL TNCRs SUBMITTED - The total number of TNCR requests for modification that have been submitted in 9-1-1 **PENDING STATUS** - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and are pending investigation whether the request is valid or invalid, and/or whether the request requires additional information to validate.

REFERRED STATUS - TNCRs assigned this status are requests which have been reviewed by the 9-1-1 Database Service Provider Data Analyst, and the request requires additional information to validate. The West Safety Services Data Analysts assigns this status to a TNCR and the request is referred to the telephone service providers for further research.

<u>TOTAL UNOPENED TNCR RECORDS STATUS</u> - The request is submitted by Akimeka on behalf the PSAP; however, processing by the 9-1-1 Database Service Provider Data Analyst has not begun.



September 1, 2017 – September 30, 2017

DISPATCHABLE LOCATION - STATUS AS OF - SEPTEMBER 2017

NARRATIVE:

During the August 2015 State of Hawaii 911 Board meeting, Akimeka provided a "State of Hawaii PSAPs Proposed ALI Compliancy with FCC 15-9" presentation. Based on the 9-1-1 Board's confirmation to add the "Dispatchable Location" information into the ALI database, Akimeka researched the format standards of each pertinent field, and tested the delivery of the data to the PSAP. After a few configuration adjustments (eliminating the TelCo comments field from appearing on the ALI Screen), Akimeka standardized an additional information data format to proceed with this project.

During the month of September 2015, Akimeka started a pilot project, entering additional location information to a verified MSAG address with multiple telephone numbers. Specifically the Kings Shops at 690250 Waikoloa Beach Dr., Waikoloa. The "Dispatchable Location" data is entered into the "Driving Directions" field in the 9-1-1 Net system, and will display on the Viper Power 911 ALI Screen in the "Exact" field should a 911 call be received from that telephone number. There are a total of 2,670 Dispatchable Locations processed to date. There were 180 Dispatchable locations submitted and processed in September, 2017.

| Dispatchable Location | | | | | | | |
|-----------------------|---|------------------------|--------------|--|--|--|--|
| 2017 | Common Name Place | TNCR* | Transactions | | | | |
| Quarter 3 | MSAG Address | Transactions Submitted | Processed** | | | | |
| Quarter 2 Carryover | | 2,120 | 2,120 | | | | |
| | Kolea Resort, 691000 Kolea Kai Cir, Waikoloa | 49 | 49 | | | | |
| July | Vista Waikoloa, 691010 Keana Pl, Waikoloa | 51 | 51 | | | | |
| | Kona Reef, 755888 Alii Dr, Kailua Kona | 48 | 48 | | | | |
| | Aston Waikoloa, 690555 Waikoloa Beach Dr | 52 | 52 | | | | |
| August | Hilton Waikoloa, 690425 Waikoloa Beach DR | 140 | 140 | | | | |
| August | Mauna Lani Shops, 681330 Mauna Lani Dr | 15 | 15 | | | | |
| | Queens Shops Waikoloa, 690201 Waikoloa Beach Dr | 15 | 15 | | | | |
| | Golf Villas, 681122 Na Ala Hele Rd, Kamuela | 12 | 12 | | | | |
| | Hilton Waikoloa, 690425 Waikoloa Beach DR | 133 | 133 | | | | |
| September | Kings Shops, 690250 Waikoloa Beach Dr, Waikoloa | 14 | 14 | | | | |
| | Mauna Lani Point, 681050 Mauna Lani Point Dr, Kamuela | 7 | 7 | | | | |
| | Palm Villas, 681376 S Pauoa Rd, Kamuela | 14 | 14 | | | | |
| Total | | 550 | 550 | | | | |
| YTD Total | | 2,670 | 2,670 | | | | |

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SPECTRUM (CHARTER) 9-1-1 VOIP DATABASE VERIFICATION PROJECT - SEPTEMBER 2017

Akimeka received the Automatic Location Identification (ALI) records from Spectrum (formally known as Charter Communications) which is the predominant Voice over Internet Protocol (VoIP) provider in the State of Hawaii. As Akimeka has access to these ALI Records, Akimeka is researching and verifying the VoIP records against an MSAG valid address and the GIS data. This research is a validation of the ALI Record to ensure that the location as provided by the VoIP provider matches the GIS Information utilized by the Public Safety Agencies within their specific County 9-1-1 Service Area. This validation reduces the potential of address or location dispute during a 9-1-1 call.

The analysis of the database records indicates that there are invalid MSAG addresses utilized by the VoIP Provider. These records are being identified, and will be sent back to Spectrum for corrective action.

| *Spectrum (Charter) 9-1-1 VoIP Database Verification Project | | | | | | |
|--|--------------|---------------|----------|-------------------|-----------|--|
| | TOTAL | TOTAL RECORDS | TOTAL | NON | PERCENT | |
| | RECORDS | MATCHING & | RECORDS | MATCHING | COMPLETED | |
| PSAP | SUBMITTED BY | VERIFIED WITH | NOT | RECORDS | | |
| ISAI | SPECTRUM | 911 DATABASES | MATCHING | CORRECTED | | |
| | (A) | (B) | | BY AKIMEKA | | |
| | | | | (C) | | |
| HAWAII County | 22,044 | 21,638 (98%) | 406 | 288 | 70.94% | |
| KAUAI County | 8,936 | 8,695 (97%) | 241 | 241 | 100.00% | |
| MAUI County | 18,256 | 17,517 (96%) | 739 | 739 | 100.00% | |
| OAHU Cilivian | 87,414 | 85,329 (98%) | 2,085 | 66 | 3.17% | |
| OAHU Military | 3,663 | 710 (19%) | 2,953 | 279 | 9.45% | |
| TOTAL | 140,313 | **133,889 | 6,424 | 1,613 | 56.7% | |

^{*} Spectrum VoIP Database received on June 21st, 2017

| (A) | VoIP Database records submitted by Spectrum to Akimeka for research and MSAG address validation. |
|--------------|---|
| (B) | Akimeka has researched and verified the VoIP record against an MSAG valid address and GIS data. Akimeka is tracking corrections needed to be performed by Spectrum. Addressing data will be updated or added in the GIS if the VoIP record is determined to be valid. |
| (C) | Verifcation Process Completed. |

^{**} Akimeka provided VoIP Records with Latitude/Longitude coordinates



Hawaii County E9-1-1 Status Report

September 1, 2017 – September 30, 2017

3. GEOGRAPHIC INFORMATION SYSTEM (GIS) – SEPTEMBER 2017

MAPPING LAYERS UPDATED (PART I)

9-1-1 GIS layers provided by Akimeka to the PSAP are designed for use on E9-1-1 systems and NG9-1-1 systems.

| HAWAII COUNTY | | | | | |
|----------------|---|-----------------------|---|--|--|
| Type of Layer | Akimeka GIS Server Date Created/ Edits Performed | Date GIS Delivered | Other/Remarks | | |
| С | CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE | | | | |
| | (Listed Alphabetically) | | | | |
| | 9/29/2017 | | Corrected one (1) Address Point for Ocean View. | | |
| | 9/29/2017 | | Corrected one (1) Address Point for Kapaau. | | |
| | 9/29/2017 | | Corrected one (1) Address Point for Keaau. | | |
| | 9/29/2017 | | Corrected one (1) Address Point for Kailua Kona. | | |
| | 9/29/2017 | | Corrected one (1) Address Point for Laupahoehoe. | | |
| | 9/29/2017 | | Corrected three (3) Address Points for Kamuela. | | |
| | 9/29/2017 | | Corrected two (2) Address Points for Hilo. | | |
| | 9/29/2017 | | Corrected one (1) Address Point for Pahoa. | | |
| | 9/29/2017 | | Added sixteen (16) Address Points for Kailua Kona. | | |
| | 9/28/2017 | | Added forty one (41) Address Points for Kailua Kona. | | |
| | 9/28/2017 | | Corrected two (2) Address Points for Kailua Kona. | | |
| | 9/28/2017 | | Corrected four (4) Address Points for Hilo. | | |
| | 9/28/2017 | | Added one (1) Address Point for Hilo. | | |
| | 9/28/2017 | | Added one (1) Address Point for Honokaa. | | |
| | 9/28/2017 | | Corrected one (1) Address Point for Honokaa. | | |
| A 44 D. t | 9/28/2017 | | Corrected twenty five (25) Address Points for Waikoloa. | | |
| Address Points | 9/28/2017 | | Corrected one (1) Address Point for Kamuela. | | |
| | 9/28/2017 | | Added one (1) Address Point for Keaau. | | |
| | 9/28/2017 | | Corrected one (1) Address Point for Captain Cook. | | |
| | 9/27/2017 | | Corrected six (6) Address Points for Hilo. | | |
| | 9/27/2017 | | Added one (1) Address Point for Hilo. | | |
| | 9/27/2017 | | Corrected one (1) Address Point for Kailua Kona. | | |
| | 9/27/2017 | | Added three (3) Address Points for Kailua Kona. | | |
| | 9/27/2017 | | Added two (2) Address Points for Kamuela. | | |
| | 9/27/2017 | | Corrected one (1) Address Point for Captain Cook. | | |
| | | 09/26/17 | | | |
| | 9/26/2017 | | Added fifty three (53) Address Points for Hilo. | | |
| | 9/26/2017 | | Added three (3) Address Point for Kamuela. | | |
| | 9/26/2017 | | Added twenty three (23) Address Points for Kailua Kona. | | |
| | 9/26/2017 | | Added four (4) Address Points for Captain Cook. | | |
| | 9/26/2017 | | Added one (1) Address Point for Hakalau. | | |
| | 9/26/2017 | | Added one (1) Address Point for Holualua. | | |



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MAPPING LAYERS UPDATED (PART II)

9-1-1 GIS layers provided by Akimeka to the PSAP are designed for use on E9-1-1 systems and NG9-1-1 systems.

| HAWAII COUNTY | | | | |
|----------------|--|-----------------------|---|--|
| Type of Layer | Akimeka GIS Server Date Created/ Edits Performed | Date GIS Delivered | Other/Remarks | |
| C | RITICAL 9-1-1 P | PUBLIC SAFET | Y LAYERS FOR DISPATCH & RESPONSE | |
| | | (Liste | d Alphabetically) | |
| | 9/26/2017 | | Added two (2) Address Points for Honokaa. | |
| | 9/26/2017 | | Added one (1) Address Point for Kapaau. | |
| | 9/26/2017 | | Added sixteen (16) Address Points for Pahoa. | |
| | 9/26/2017 | | Added two (2) Address Points for Papaaloa. | |
| | 9/26/2017 | | Added eleven (11) Address Points for Keaau. | |
| | 9/26/2017 | | Added one (1) Address Point for Kealakekua. | |
| | 9/26/2017 | | Added eight (8) Address Points for Kurtistown. | |
| | 9/26/2017 | | Added one (1) Address Point for Laupahoehoe. | |
| | 9/26/2017 | | Added nineteen (19) Address Points for Mountain View. | |
| | 9/26/2017 | | Added three (3) Address Points for Naalehu. | |
| | 9/26/2017 A | | Added ten (10) Address Points for Ocean View. | |
| | 9/26/2017 | | Added one (1) Address Point for Pahala. | |
| | 9/26/2017 | | Added six (6) Address Points for Volcano. | |
| | 9/26/2017 | | Added three (3) Address Points for Waikoloa. | |
| | 9/25/2017 | | Added two (2) Address Points for Captain Cook. | |
| A 44 D. ! | 9/25/2017 | | Added one (1) Address Point for Hilo. | |
| Address Points | 9/25/2017 | | Added six (6) Address Points for Kailua Kona. | |
| | 9/25/2017 | | Added one (1) Address Point for Kamuela. | |
| | 9/25/2017 | | Added four (4) Address Points for Keaau. | |
| | 9/25/2017 | | Added one (1) Address Point for Kealakekua. | |
| | 9/25/2017 | | Added one (1) Address Point for Kurtistown. | |
| | 9/25/2017 | | Added two (2) Address Points for Mountain View. | |
| | 9/25/2017 | | Added two (2) Address Points for Ocean View. | |
| | 9/25/2017 | | Added one (1) Address Point for Pahoa. | |
| | 9/25/2017 | | Added one (1) Address Point for Pepeekeo. | |
| | 9/25/2017 | | Added two (2) Address Points for Volcano. | |
| | 9/22/2017 | | Added one (1) Address Point for Pahoa. | |
| | 9/22/2017 | | Added one (1) Address Point for Honokaa. | |
| | 9/22/2017 | | Added one (1) Address Point for Kurtistown. | |
| | 9/22/2017 | | Added one (1) Address Point for Mountain View. | |
| | 9/22/2017 | | Added one (1) Address Point for Hakalau. | |
| | 9/22/2017 | | Added two (2) Street Centerlines for Honokaa. | |



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MAPPING LAYERS UPDATED (PART III)

9-1-1 GIS layers provided by Akimeka to the PSAP are designed for use on E9-1-1 systems and NG9-1-1 systems.

| HAWAII COUNTY | | | | | |
|---------------|---|-----------------------|--|--|--|
| Type of Layer | Akimeka GIS Server Date Created/ Edits Performed | Date GIS Delivered | Other/Remarks | | |
| Cl | CRITICAL 9-1-1 PUBLIC SAFETY LAYERS FOR DISPATCH & RESPONSE | | | | |
| | | (Liste | l Alphabetically) | | |
| | 9/21/2017 | | Added one (1) Address point in Kailua Kona. | | |
| | 9/20/2017 | | Added seven (7) Address Points for Kailua Kona. | | |
| | 9/20/2017 | | Corrected eight (8) Address Points for Kailua Kona. | | |
| | 9/20/2017 | | Added six (6) Address Points for Hilo. | | |
| | 9/20/2017 | | Corrected five (5) Address Points for Hilo. | | |
| | 9/20/2017 | | Corrected one (1) Address Point for Keaau. | | |
| | 9/20/2017 | | Corrected one (1) Address Point for Volcano. | | |
| | 9/20/2017 | | Corrected two (2) Address Points for Kealakekua. | | |
| | 9/20/2017 | | Corrected one (1) Address Point for Kamuela. | | |
| | 9/19/2017 | | Added fifty (50) Address Points for Keauhou. | | |
| | 9/19/2017 | | Corrected one (1) Address Point for Keauhou. | | |
| | 9/19/2017 | | Corrected one (1) Address Point for Kealakekua. | | |
| | 9/19/2017 | | Corrected fifteen (15) Address Points for Hilo. | | |
| | 9/19/2017 | | Corrected two (2) Address Points for Keaau. | | |
| | 9/19/2017 | | Corrected one (1) Address Point for Kurtistown. | | |
| | 9/19/2017 | | Corrected two (2) Address Points for Pahoa. | | |
| | 9/19/2017 | | Corrected thirteen (13) Address Points for Kailua-Kona. | | |
| | 9/19/2017 | | Corrected one (1) Address Point for Kamuela. | | |
| | 9/19/2017 | | Corrected one (1) Address Point for Waimea. | | |
| | 9/19/2017 | | Added two (2) Address Points for Kailuea Kona. | | |
| | 9/18/2017 | | Corrected five (5) Address Points for Hilo. | | |
| | 9/18/2017 | | Corrected one (1) Address Point for Keaau. | | |
| | 9/18/2017 | | Corrected two (2) Address Points for Kurtistown. | | |
| | 9/18/2017 | | Corrected three (3) Address Points for Kailua Kona. | | |
| | 9/18/2017 | | Corrected one (1) Address Point for Ocean View. | | |
| | 9/15/2017 | | Corrected one (1) Address Point for Volcano. | | |
| | 9/13/2017 | | Spatially Corrected ten (10) Street Centerlines for Kamuela. | | |
| | 9/13/2017 | | Corrected one (1) Address Point in Keaau. | | |
| | 9/13/2017 | | Added one (1) Address Point for Holualoa. | | |
| | 9/13/2017 | | Added nine (9) Address Points for Kailua Kona. | | |
| | | 09/12/17 | | | |
| | 9/7/2017 | | Added two (2) Address Points for Keaau. | | |

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MAPPING LAYERS UPDATED (PART IV)

9-1-1 GIS layers provided by Akimeka to the PSAP are designed for use on E9-1-1 systems and NG9-1-1 systems.

| HAWAII COUNTY | | | |
|-------------------------|-----------------|-----------|----------------------------------|
| | Akimeka GIS | | |
| Type of Layer | Server | Date GIS | Other/Remarks |
| Type of Layer | Date Created/ | Delivered | Our / Kemarks |
| | Edits Performed | | |
| CI | RITICAL 9-1-1 I | | Y LAYERS FOR DISPATCH & RESPONSE |
| | 1 | (Liste | d Alphabetically) |
| Airports | | | |
| Bridges | | | |
| Building Footprints | | | |
| Bus Stops | | | |
| Churches | | | |
| Coastal Names | | | |
| Coastline | | | |
| Common Places | | | |
| Correctional Facilities | | | |
| Emergency Callboxes | | | |
| Emergency Operation | | | |
| Centers | | | |
| Emergency Shelters | | | |
| | | 09/26/17 | |
| ESZ/ESN | 9/25/2017 | | Corrected 432 & 535. |
| | 9/21/2017 | | Corrected 206 |
| | | 09/26/17 | |
| Fire Beats | 9/26/2017 | | Corrected 28. |
| | 9/21/2017 | | Corrected 9 and 16 |
| Fire Districts | | | |
| Fire Response Areas | | | |
| Fire Stations | | | |
| Food & Beverage | | | |
| Gas Stations | | | |
| Gate Codes | | | |
| Government Buildings | | | |
| Harbors | | | |
| Helipads | | | |
| Hiking Trails | | | |
| Hospitals | | | |
| Hydrants | | | |
| Hyrdology Layers | | | |
| Incident Response Areas | | | |

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MAPPING LAYERS UPDATED (PART V)

9-1-1 GIS layers provided by Akimeka to the PSAP are designed for use on E9-1-1 systems and NG9-1-1 systems.

| | HAWAII COUNTY | | | | |
|-------------------------|---|-----------------------|---|--|--|
| Type of Layer | Akimeka GIS Server Date Created/ Edits Performed | Date GIS Delivered | Other/Remarks | | |
| CI | RITICAL 9-1-1 P | | Y LAYERS FOR DISPATCH & RESPONSE d Alphabetically) | | |
| Lodging | | | | | |
| Major Roads | | | | | |
| Medic Beats | | | | | |
| Medic Districts | | | | | |
| Madia Danasaa Assaa | | 09/26/17 | | | |
| Medic Response Areas | 9/25/2017 | | Corrected 8, 9, 14, & 16. | | |
| Medic Stations | | | | | |
| Medical Facilities | | | | | |
| Milepost Markers | | | | | |
| | | 09/26/17 | | | |
| MSAG Communities | 9/21/2017 | | Corrected Kamuela and Waikoloa. | | |
| MSAG Communities | | 09/12/17 | | | |
| | 9/12/2017 | | Corrected Kurtistown, Hilo, Keaau, Kamuela, and Waikoloa. | | |
| Net Junctions | | | | | |
| Ocean Rescue Boundaries | | | | | |
| Ocean Safety | | | | | |
| Parcels | | | | | |
| Parks | | | | | |
| Parks Polygon | | | | | |
| Points of Interest | | | | | |
| Points of Interest | | | | | |
| | | 09/26/17 | | | |
| | 9/25/2017 | | Corrected 430 & 431. | | |
| Police Beats | 9/21/2017 | | Corrected 432, 433, 444 | | |
| Police Beats | 9/13/2017 | | Corrected 145 and 833. | | |
| | | 09/12/17 | | | |
| | 9/1/2017 | | Corrected Boundaries for 430 and 431. | | |
| | | 09/26/17 | | | |
| Police Districts | 9/26/2017 | | Corrected 6. | | |
| | 9/13/2017 | | Corrected 304. | | |
| Police Response Areas | | | | | |
| Police Stations | Police Stations | | | | |

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MAPPING LAYERS UPDATED (PART VI)

9-1-1 GIS layers provided by Akimeka to the PSAP are designed for use on E9-1-1 systems and NG9-1-1 systems.

| HAWAII COUNTY | | | | |
|--------------------------|---|-----------------------|--|--|
| Type of Layer | Akimeka GIS Server Date Created/ Edits Performed | Date GIS Delivered | Other/Remarks | |
| CI | RITICAL 9-1-1 F | | TY LAYERS FOR DISPATCH & RESPONSE d Alphabetically) | |
| Post Offices | | ` | | |
| Schools | | | | |
| | 9/27/2017 | | Added six (6) Street Centerlines for Kailua Kona. | |
| | 9/27/2017 | | Corrected two (2) Street Centerlines for Volcano. | |
| | | 09/26/17 | | |
| | 9/22/2017 | | Added two (2) Street Centerlines for Captain Cook. | |
| | 9/22/2017 | | Added two (2) Street Centerlines for Kamuela. | |
| | 9/22/2017 | | Added six (6) Street Centerlines for Kailua Kona. | |
| | 9/21/2017 | | Corrected one (1) Street Centerline for Kamuela. | |
| | 9/21/2017 | | Added three (3) Street Centerlines in Naalehu. | |
| | 9/21/2017 | | Added six (6) Street Centerlines in Hilo. | |
| | 9/18/2017 | | Spatially Corrected forty two (42) Street Centerlines for Kamuela. | |
| | 9/15/2017 | | Spatially corrected 60 Street Centerlines for Kamuela. | |
| Street Centerlines | 9/15/2017 | | Corrected two (2) Street Centerlines for Volcano. | |
| | 9/14/2017 | | Spatially Corrected eighty three (83) Street Centerlines for Kamuela. | |
| | 9/14/2017 | | Added two (2) Street Centerlines for Kamuela. | |
| | 9/13/2017 | | Corrected three (3) Street Centerlines for Keaau. | |
| | | 09/12/17 | | |
| | 9/11/2017 | | Spatially Corrected sixty one (61) Street Centerlines for Kamuela. | |
| | 9/8/2017 | | Spatially Corrected ninety four (94) Street Centerlines for Kamuela. | |
| | 9/7/2017 | | Spatially Corrected fifty one (51) Street Centerlines for Kamuela. | |
| | 9/6/2017 | | Spatially Corrected one hundred and four (104) Street Centerlines for Kamuela. | |
| | 9/5/2017 | | Spatially Corrected ninety eight (98) Street Centerlines for Kamuela. | |
| | 9/1/2017 | | Spatially Corrected sixty two (62) Street Centerlines for Kamuela. | |
| Subdivisions | | | | |
| Tow Jurisdictions | | | | |
| Tsunami Evacuation Zones | | | | |
| Tsunami Heights | | | | |
| Waste Water Plants | | | | |
| WSP Cell Sectors | | 09/26/17 | | |
| | 9/21/2017 | | Per Sprint CRS | |
| WSP Cell Towers | | 09/26/17 | | |
| | 9/21/2017 | | Per Sprint CRS | |

Hawaii County E9-1-1 Status Report

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GEOGRAPHIC INFORMATION SYSTEM (GIS) NARRATIVES

GIS KEY ACTIVITIES/UPDATES

GIS Key activities include the events such as GIS deliverables, meetings, agreements, etc.

| Date | Key Activities/Updates |
|-----------|---|
| 9/26/2017 | MapFlex deliverable which included the following updated layers: Address Points, |
| | Cell Sectors, Cell Towers, Points of Interest, Street Centerlines, ESN, MSAG |
| | Communities, and Police Response Areas |
| 9/26/2017 | Spillman deliverable which included the following updated layers: Address Points, |
| | City, Common Names Alt Table, Display Streets, Fire EMS Zone, First In, Points of |
| | Interest, POI Alt Names, Police Zones, Street Centerlines, Street Alt Names, Street |
| | Routes |
| 9/12/2017 | MapFlex deliverable which included the following updated layers: Address Points, |
| | Cell Sectors, Cell Towers, Points of Interest, Street Centerlines, ESN, MSAG |
| | Communities |
| 9/12/2017 | Spillman deliverable which included the following updated layers: Address Points, |
| | City, Common Names Alt Table, Display Streets, Fire EMS Zone, First In, Points of |
| | Interest, POI Alt Names, Police Zones, Street Centerlines, Street Alt Names, Street |
| | Routes |



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ADDRESS POINTS AND STREET CENTERLINES UPDATE COMPARISON

On a routine basis, upon receipt of Hawai'i County Planning Department's Address Points and Street Centerlines layer updates, Akimeka compares and incorporates any of the County's additions, changes, and deletions into the Akimeka Address Points and Street Centerlines layers that appear necessary for the dispatch and response of 911 personnel.

The Address Points and Street Centerlines layer comparative analysis was completed on the updates received from the Hawai'i County Planning Department on **September 26, 2017**. Results are as follows:

| HAWAII COUNTY | Address Points Layer | Street Centerlines Layer |
|-------------------------------|-------------------------|-----------------------------|
| New Addresses Added | 187 | |
| Addresses Removed | 0 | |
| Address Street Name Changes | 1 | |
| Address Street Number Changes | 1 | |
| New Street Segments Added | | 8 |
| Street Segments Removed | | 0 |
| Street Segment Range Changes | | 5 |
| Street Segment Name Changes | | 0 |

NOTE:

Some Address Points have multiple updates that are required, including Street Name and Street Number. These updates are counted as separate actions since the changes are required in order to make the GIS layers "9-1-1 capable" for CAD system recommendations affecting public safety dispatch and response operations.

POLICE BEAT REVIEW

Beginning in late 2015 and continuing in January 2016, Akimeka has been conducting a Police Beats review process as part of an annual update and in addition, preparation for Hawaii County's CAD system deployment. During this time, the Police Beats are also reviewed with the written descriptions of the Hawaii Police Beat Boundaries, whereby corrections are made to the Police Beat GIS layer where applicable in an effort to synchronize the GIS layer with the written descriptions and provide the 911 centers in Hawaii with a more accurately defined boundary layer which align with operational jurisdictions.

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- To better service the public safety needs of Hawaii County, Akimeka compared the written descriptions of the Hawaii Police
 Beats as recorded in Document Number GO 204 with an effective date of June 27, 2011, and made corrections to the Police
 Beats GIS layer where needed. In addition, Akimeka has been documenting any recommendations for document description
 updates.
 - a. Akimeka reviewed the written descriptions for the Hawaii Police Beats and cross referenced it to the Police Beats GIS layer. The boundaries to all seventy-six police beats as well as the area falling within the jurisdiction of the Hawaii Volcanoes National Park were edited for greater accuracy.
 - b. Akimeka has documented all potential discrepancies between the written descriptions and GIS layer for a thorough review upon completion. Akimeka has also produced several maps to better illustrate some of the larger discrepancies.
 - c. Upon completion of the GIS editing procedures, Akimeka will participate in a Police Beat review process with the Hawaii Police Department to further refine the boundaries to the Police Beats GIS layer and the written descriptions for those boundaries. This process will finalize the synchronization between the GIS layer and the written descriptions; provide additional precision and accuracy to both the GIS layer and written descriptions; and eliminate all discrepancies so that confusion and/or misinterpretation of those boundaries do not hinder public safety needs.
 - d. During the month of February 2016, Akimeka corrected the boundaries to the GIS layers that are associated with the Police Beats so that proper alignment would occur between the associated layers. This included correcting boundaries to six ESNs and three Police Districts. Those corrected layers were delivered to MapFlex and made available to the dispatchers on February 17th.
 - e. During the month of March 2016, Akimeka corrected the boundaries to the Police Response Areas so they would be aligned properly with the Police Beats and be topologically error free. This included correcting the boundaries to all seventy-six police response areas as well as the area falling within the jurisdiction of the Hawaii Volcanoes National Park.
 - f. During the month of August 2016, Akimeka is awaiting the final review process of the Police Beat layer with the Hawaii Police Department. Besides the Police Beat layer, the review process with the Hawaii Police Department will also likely include a review process of the Police Districts layer as well as the Police Response Areas layer.
 - g. During the month of September 2016, Akimeka began creating a series of large-scale maps to illustrate in detail the police beat boundaries. The maps are anticipated to be completed during October 2016, at which time they will be made available for examination by the Hawaii Police Department for accuracy.
 - h. During the month of October 2016, Akimeka created the first draft of a series of seventy-seven large-scale maps one map for each police beat as well as one map of the entire county. Besides police beat boundaries, streets, and aerial imagery, the maps also contain points of interest that are referenced within the written descriptions of the Hawaii Police Beat Boundaries, as well as other important features such as high schools, colleges, and major attractions so that the maps will be easier to validate the accuracy of. After reviewing the maps, Akimeka recognized enhancements that could be made to them to further their value as a communication device so that a more thorough review process can take place, which will ultimately result in greater informed decision making in regards to boundary and written description revisions.
 - i. During the month of December 2016, Akimeka proposed boundary modifications to Police Beats 148, 430, and 435 to the Hawaii Police Department. The proposed boundary modifications would have the affected beats intersect

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between the new Daniel K Inouye Hwy and Mile Marker 43, rather than the southern boundary of the Kilohana Girl Scout Camp. To help illustrate the boundary modifications, Akimeka sent the Hawaii Police Department a map detailing the current and proposed boundaries of the area that would be affected by the change. The Hawaii Police Department notified Akimeka that such a change would require a process of reviews and proposals. Akimeka is now awaiting the results of this process, at which time the final drafts of the Police Beat Maps will be completed and ready for examination.

- j. During the month of August 2017, HPD had notified Akimeka of some beat boundaries which were not in alignment with the General Orders (GO). Akimeka immediately began reviewing these areas in question to determine what may be needed. Any boundaries that require an update will be made during the month of September 2017.
- k. During the month of September 2017, HPD and Akimeka met to review and update some of the Police Beats along the Kailua Kona coast. During the meeting several updates were made to positively improve the accuracy of the boundaries and to align with the appropriate responses. The updates received HPD approval once completed. The updates were provided for upload in the Spillman on September 26, 2017.
 - i. It was agreed that once the data was made available to the PSAP, they would review these updated areas to test functionality in the CAD and to review any other potential updates that could be made.

CAD SYSTEM DEPLOYMENT

The system has not gone live yet but has received regular GIS updates, as scheduled.

Throughout the month of August 2017, HPD had some opportunities to work on the Spillman in a test environment to validate various functions of the CAD and to identify any areas that could potentially be improved. Based on the review process, there were a couple items that may require additional work to the GIS, configurations within the system, or a combination of the two.

- 1. P-Codes were not attached to the call nature
 - a. Spillman responded that they need to be entered to the command line entry or do not click the drop-down and type p-code into the nature box
- Unable to search mile markers
 - a. Spillman let HPD know that Akimeka has included these in the data and need to be searched starting with "MM". For example, MM 130-4. It can also be entered as 130-4.
 - b. If format requires a change, it can be made via the data.
- 3. Dispatch unable to search just the street names without having a valid address. Dispatch also noted that they are unable to click in the map to create an incident.
 - a. Akimeka and Spillman had discussed some potential solutions. Akimeka recommended this be handled through an additional locator within Spillman. Spillman had initially recommended adding points along a street with each having a unique name that can be searched. Akimeka's hesitancy on that solution is that dispatch would have to remember each unique name and for streets which are lengthy, the extent could be several miles away.
- 4. General Order review and Boundary

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- a. Dispatch had identified some boundaries which aren't aligned with the GO. Akimeka began an initial review on this during the end of August and will continue into September 2017. The initial review showed that some boundaries could be slightly modified. Some others require discussion with HPD since the GO could be interpreted differently based on general descriptions.
- 5. Unable to search intersections with a "/" separator
 - a. Spillman applied update to CAD to allow this
 - b. Akimeka also added this into the Locator within the geodatabase for an ongoing and more permanent fix for the Spillman

On September 28, 2017, Akimeka and Spillman held a conference call to discuss some of the items in the training sessions, noted above. There were two key topics discussed; the Street Name searches (in item #3 above) and an additional item not previously discussed – the ability to search street names with first 5 characters.

Spillman discussed a workflow they saw being used to make these changes in the GIS. Akimeka reserved a slight hesitation with the workflows because there is room for potential discrepancies for the PSAP. The proposed solution for the Street Names, for instance, requires the creation of a midpoint location on a particular street within a given community. One of the issues with this, is that for several streets in Hawaii County the midpoint will be entirely unrelated to the potential caller's location, and may add time to the call process. Akimeka identified the proposed solution as a potential fix to a system limitation. Akimeka thought it was best to discuss the items with HPD for their approval and awareness of the potential risk involved.

MAPFLEX SYSTEM

During the month of September 2017, the MapFlex system received updates manually as a result of MapFlex having several issues pertaining to the automated upload processes.

Considering that the MapFlex initiative being provided by Hawaiian Telecom and sub-contractor, West, was implemented across the State of Hawaii, in the below narrative there is some information pertaining to all of the Hawaiian Islands. For a record of historical information regarding the MapFlex system, please see MSRs during the 2015 and 2016 years.

- 1. Akimeka delivered GIS data to the MapFlex system on the following dates in September 2017
 - a. **Hawaii County** September 12th, 2017 and September 26th, 2017
 - b. **Maui County** September 13th, 2017 and September 27th, 2017
 - c. **Kauai County** September 14th, 2017 and September 28th, 2017
 - d. **Honolulu** September 1st, 2017, September 15th, 2017 and September 29th, 2017



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MAPFLEX ISSUES

Below is a detailed list of issues regarding the MapFlex systems throughout the State of Hawaii.

| DATE | ISSUE | DESCRIPTION | STATUS |
|-----------|-------------------------------------|--|---|
| 7/24/2016 | Automatic Uploads Malfunctioning | It was identified that the Automatic uploads were creating issues within the MapFlex systems, where locators were not being published, etc. as a result of a scripting error at West. Manual uploads have been taking place of the GIS as necessary and agreed by all PSAPs. | Pending, however as of April 2017, West/HT has decided to implement a process to upload data the following week after GIS uploads (manually) |
| 7/24/2016 | Blank MapFlex Screen | The MapFlex screen went blank and there was no mapping capability, similar to what had occurred with Maui PD. Resulted from West's automatic update script. All of the PSAPs agreed to hold off on all GIS updates in MapFlex until West has resolved the issue. | Resolved (Nov 2016) There have been no reported blank screens |
| 8/2016 | Wireless Addresses | MapFlex system began displaying wireless information incorrectly. MapFlex system is doing a reverse query for additional information in the GIS and this is overriding the ALI information with the closest address in the GIS. | Partially Resolved (Nov 2016) The overriding ALI with updated Lat/Longs from the GIS is still occurring |
| 8/2016 | Text-to-911 Icons | Icons for text calls have stopped displaying. Previously when calls came in as a text call, there would be an icon displaying "TEXT" where the call was plotted. | Resolved (Nov 2016) |
| 11/2016 | Phase I Display | Wireless Phase I calls plotting at centroid of coverage area and landing in the ocean. After installation of new MapFlex version to correct other issues, the configurations for Wireless Phase I were not set up properly by West, in which the mapping did not point to the correct information in MapFlex. | Resolved (Dec 2016) According to PSAPs, it's not fully resolved. The icon of the tower still doesn't plot for Phase I. |
| 11/2016 | Wireless Confidence | Sprint calls coming across with unusually high confidence. Coordination is taking place with Sprint and West. West provides the PDE services for Sprint. | Pending |
| 1/18/2017 | RDC MapFlex | During a meeting between Akimeka and RDC, it was identified that HPD GIS data was contained within the RDC MapFlex and was missing RDC's data. Due to the proprietary nature of the GIS data provided by Akimeka for the civilian PSAP's mapping systems and the confidential information contained to support HPD operations, it was concerning. Actions were taken to request West to stop this and to pull RDC's archive data. West has since replied that they never knew RDC was military and functioned separately from the civilian PSAPs. HPD, RDC, and Akimeka have taken corrective actions to construct GIS data that will be used as a baseline for the RDC and to remove sensitive information supplied for the RDC MapFlex. | Pending – Akimeka notified West that they had data ready on June 28, 2017. Akimeka was given notice that they could proceed on July 7 th . The updated GIS data was loaded into the RDC MapFlex on July 24 and 25. |

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| 3/22/2017 | ArcGIS Address Locator | The locators in MapFlex have a configurations which does not include ESNs. A reported issue has occurred with the Sheraton in Waikiki. The address locator does not differentiate between the Sheraton hotel and the surf break and plots on the surf break. The bigger issue is that this same issue will occur with complexes that have same primary address. | A new SP 5.4 update by West is aimed to correct this issue. |
|-----------|---|--|---|
| 5/17/2017 | VoIP Calls Plotting Incorrectly | Recognized in late April and early May 2017, the PSAPs have been receiving several VoIP calls which are plotting in the incorrect locations. After further research it was determined that it is because MapFlex is configured to plot the received Lat/Long. The problem is that these are not always maintained properly and that ideally the system should first choose to match with the GIS data based on the provided address. During the September 20, 2017 PSAP conference call, HT relayed there was confirmation that the Time Warner records were in fact passing through the West FMCC. | West is currently researching their configurations (May - June 2017). Aside from the MapFlex, Akimeka is working with Spectrum (previously Time Warner) to correct their Lat/Longs on a mass scale Discussion has taken place on a temporary solution by suppressing XY in ALI. |
| 5/17/2017 | Landline Calls Producing X/Y on calls | It was determined that for normal landline calls, the X/Y coordinates are being sent. The PSAPs have asked where these are being generated and why would they be sent for landline calls. | West is looking into this (May - June 2017) |

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4. SERVICE REQUESTS TRANSACTIONS

OPEN SERVICE REQUESTS – SEPTEMBER 2017

| # | Date | Ticket # | Description | PSAP | Urgency | Comments |
|---|------|----------|-------------|------|---------|----------|
| | | | None | | | |
| | | | | | | |

Note* There are no (0) opened service request pending for September 2017.

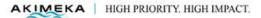
SERVICE REQUEST YEAR-TO-DATE (YTD) SUMMARY - 2017

| HAWAII COUNTY | | | | MSAG SERVICE REQUEST CATEGORIES | | | | | |
|-----------------|---------|--------|------|---------------------------------|--------|----------|--------|---------|--------|
| 2017 | TOTAL | | 0 | WIRELINE | | WIRELESS | | VoIP | |
| | Created | Closed | Open | Created | Closed | Created | Closed | Created | Closed |
| 2016 Carryover* | | | 1 | | | | | | |
| January | 3 | 3 | 1 | 2 | 2 | 0 | 0 | 1 | 1 |
| February | 2 | 2 | 1 | 2 | 2 | 0 | 0 | 0 | 0 |
| March | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| April | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 |
| May | 11 | 11 | 1 | 8 | 8 | 0 | 0 | 3 | 3 |
| June | 4 | 4 | 1 | 2 | 2 | 0 | 0 | 2 | 2 |
| July | 2 | 3 | 0 | 1 | 2 | 0 | 0 | 1 | 1 |
| August | 3 | 3 | 0 | 1 | 1 | 0 | 0 | 2 | 2 |
| September | 4 | 4 | 0 | 4 | 4 | 0 | 0 | 0 | 0 |
| October | | | | | | | | | |
| November | | | | | | | | | |
| December | | | | | | | | | |
| TOTAL | 31 | 32 | 0 | 21 | 22 | 0 | 0 | 10 | 10 |

* The 2016 Carryover row indicated the number of Service Requests that were opened in 2016 and brought forward into 2017 in an effort to track the service request until completion.

Detailed information on service tickets are available upon request.

| | Category | Description |
|---------------------|----------|---|
| | Wireline | Telephone Number (ALI) Discrepancies from land line phones that have been submitted to West Safety Services via 9-1-1 Net for correction. |
| <u>Definitions:</u> | Wireless | Telephone Number (ALI) Discrepancies from phones that were land lines at one time, and were ported out to a wireless carrier. However, the phone number was never removed from the MSAG database. |
| | VoIP | Telephone Number (ALI) Discrepancies from VoIP phones that have been submitted to Time Warner Cable (TWCBL) for correction |



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5. E9-1-1 DATABASE SYNCHRONIZATION

(<u>Reference:</u> NENA 71-501, Version 1.1 – NENA Information Document for Synchronizing Geographic Information System databases with MSAG & ALI)

Next Scheduled Database Synchronization – November 2017

AUDIT SUMMARY RESULTS - NOVEMBER 2017 -- TBA

AUDIT SUMMARY RESULTS COMPARISION - NOVEMBER 1, 2017 VS AUGUST 1, 2017 -- TBA

AUDIT SUMMARY RESULTS -- TBA

INVALID MSAG STREETS AND ADDRESS RANGES - ESN X99 RECORDS -- TBA

AUTOMATIC LOCATION IDENTIFICATION (ALI) DISCREPANCY REPORT -- TBA

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